

Setting method of shape, working stress and using environment of steel member

Patent number: CN1344932 (A)
Publication date: 2002-04-17
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Classification:
 - international: **G01N1/28; C22C38/04; C22C38/22; G01N3/00; G01N3/08;
 G01N33/20; G01N1/28; C22C38/04; C22C38/22; G01N3/00;
 G01N3/08; G01N33/20; (IPC1-7): G01N33/20; G01L1/00**
 - european: C22C38/04; C22C38/22
Application number: CN20011040712 20010831
Priority number(s): JP20000264716 20000831

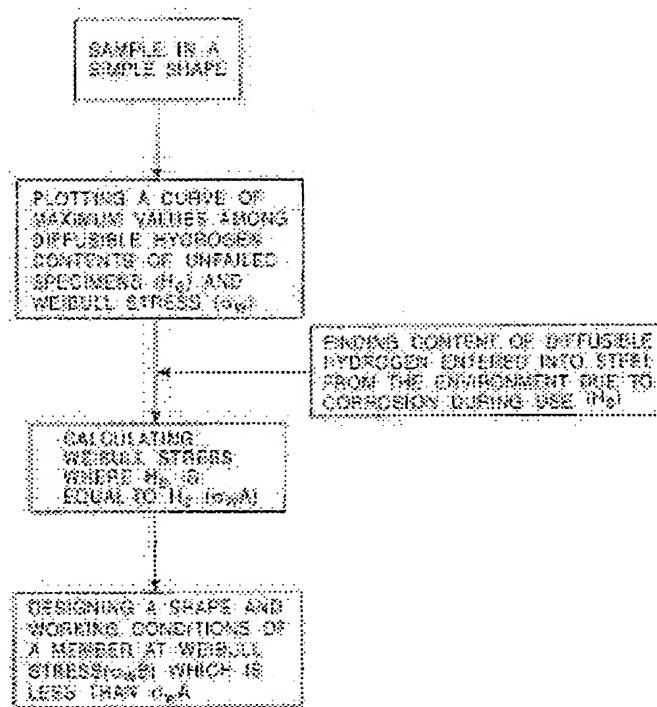
Also published as:

 EP1184657 (A2)
 EP1184657 (A3)
 US2002043111 (A1)
 US6523416 (B2)
 KR20020018136 (A)

Abstract not available for CN 1344932 (A)
 Abstract of correspondent: EP 1184657 (A2)

A delayed fracture in high strength steel is effectively prevented by appropriately setting a shape and working stress, and working environment of a high strength member having more than 1,000 Mpa of tensile strength. To this end, the relationship between a maximum value of diffusible hydrogen contents (H_c) of unfailed specimens and Weibull stress (σ_wA) are found and the content (H_e) of diffusible hydrogen entering the steel from the environment due to corrosion during the use of the steel member is also found. Then, the value of Weibull stress for the hydrogen content H_c that is equal to the environmental value H_e is found, thus determining the shape and working stress of the steel member so as to provide stress (σ_wB) below the Weibull stress (σ_wA).

FIG. 1



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